



# UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE  
United States Patent and Trademark Office  
Address: COMMISSIONER FOR PATENTS  
P.O. Box 1450  
Alexandria, Virginia 22313-1450  
[www.uspto.gov](http://www.uspto.gov)

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/868,994	06/22/2001	Tomonari Yoshimura	7402/71290	7987
22242	7590	08/09/2005	EXAMINER	
FITCH EVEN TABIN AND FLANNERY			PHAN, HANH	
120 SOUTH LA SALLE STREET				
SUITE 1600			ART UNIT	PAPER NUMBER
CHICAGO, IL 60603-3406				2638

DATE MAILED: 08/09/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

<b>Office Action Summary</b>	<b>Application No.</b>	<b>Applicant(s)</b>	
	09/868,994	YOSHIMURA ET AL.	
<b>Examiner</b>		<b>Art Unit</b>	
Hanh Phan		2638	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

#### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

#### Status

- 1) Responsive to communication(s) filed on 22 June 2001.
- 2a) This action is FINAL.      2b) This action is non-final.
- 3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

#### Disposition of Claims

- 4) Claim(s) 1-6 and 8-12 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) Claim(s) \_\_\_\_\_ is/are allowed.
- 6) Claim(s) 1-6 and 8-12 is/are rejected.
- 7) Claim(s) \_\_\_\_\_ is/are objected to.
- 8) Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

#### Application Papers

- 9) The specification is objected to by the Examiner.
- 10) The drawing(s) filed on \_\_\_\_\_ is/are: a) accepted or b) objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

#### Priority under 35 U.S.C. § 119

- 12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) All    b) Some \* c) None of:
  1. Certified copies of the priority documents have been received.
  2. Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

#### Attachment(s)

- |  |   |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892)   | 4) <input type="checkbox"/> Interview Summary (PTO-413)                     |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)                                   | Paper No(s)/Mail Date. _____  |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)<br>Paper No(s)/Mail Date _____ | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
|  | 6) <input type="checkbox"/> Other: _____                                    |

## DETAILED ACTION

1. This Office Action is responsive to the Amendment filed on 05/03/2005.

### ***Double Patenting***

2. The nonstatutory double patenting rejection is based on a judicially created doctrine grounded in public policy (a policy reflected in the statute) so as to prevent the unjustified or improper timewise extension of the "right to exclude" granted by a patent and to prevent possible harassment by multiple assignees. See *In re Goodman*, 11 F.3d 1046, 29 USPQ2d 2010 (Fed. Cir. 1993); *In re Longi*, 759 F.2d 887, 225 USPQ 645 (Fed. Cir. 1985); *In re Van Ornum*, 686 F.2d 937, 214 USPQ 761 (CCPA 1982); *In re Vogel*, 422 F.2d 438, 164 USPQ 619 (CCPA 1970); and, *In re Thorington*, 418 F.2d 528, 163 USPQ 644 (CCPA 1969).

A timely filed terminal disclaimer in compliance with 37 CFR 1.321(c) may be used to overcome an actual or provisional rejection based on a nonstatutory double patenting ground provided the conflicting application or patent is shown to be commonly owned with this application. See 37 CFR 1.130(b).

Effective January 1, 1994, a registered attorney or agent of record may sign a terminal disclaimer. A terminal disclaimer signed by the assignee must fully comply with 37 CFR 3.73(b).

3. Claims 1-6 and 8-12 are rejected under the judicially created doctrine of obviousness-type double patenting as being unpatentable over claims 1-16 of U.S. Patent No. 6,777,083 (Mizota et al) in view of Sasaki et al (US Patent 4,693,553).

Regarding claims 1 and 8, Mizota et al (US Patent No. 6,777,083) teaches a plastic optical fiber having a core made of methacrylate polymer free from benzene rings, the amount of sulfur atoms that are not bound to the polymer in said core being set to 5ppm or less (see claim 1 of Mizota et al).

Mizota differs from claims 1 and 8 in that he fails to teach one end of the plastic optical fiber being optically coupled to a short-wavelength light-emitting element for emitting light signals corresponding to electrical signals input from the outside and an

optical receiver having a photodetecting element coupled optically to the other end of the plastic optical fiber and adapted to generate an output electrical signal in accordance with the output of the photodetecting element. However, Sasaki in US Patent No. 4,693,553 teaches one end of the plastic optical fiber being optically coupled to a short-wavelength light-emitting element for emitting light signals corresponding to electrical signals input from the outside and an optical receiver having a photodetecting element coupled optically to the other end of the plastic optical fiber and adapted to generate an output electrical signal in accordance with the output of the photodetecting element (Fig. 1, col. 6, lines 47-67). Therefore, it would have been obvious to one having skill in the art at the time the invention was made to incorporate the one end of the plastic optical fiber being optically coupled to a short-wavelength light-emitting element for emitting light signals corresponding to electrical signals input from the outside and an optical receiver having a photodetecting element coupled optically to the other end of the plastic optical fiber and adapted to generate an output electrical signal in accordance with the output of the photodetecting element as taught by Sasaki in the system of Mizota. One of ordinary skill in the art would have been motivated to do this since Sasaki suggests in column 6, lines 47-67 that using such the one end of the plastic optical fiber being optically coupled to a short-wavelength light-emitting element for emitting light signals corresponding to electrical signals input from the outside and an optical receiver having a photodetecting element coupled optically to the other end of the plastic optical fiber and adapted to generate an output electrical signal in accordance with the output of the photodetecting element have advantage of allowing

providing an optical communication system with high capacity and high speed and reducing the transmission loss.

Regarding claims 2 and 9, Mizota further teaches wherein the amount of sulfur atoms that are not bound to the polymer in said core is set to 3ppm or less (see claim 11 of Mizota).

Regarding claims 3, Mizota further teaches wherein the amount of sulfur atoms that are bound to the polymer in said core is set to a value in the range from 200 to 1000 ppm (see claim 1 of Mizota).

Regarding claims 4-6 and 10, the combination of Mizota and Sasaki teaches the short-wavelength light-emitting element emits light having the maximum light emission wavelength of 600nm or less (Fig. 1 of Sasaki).

Regarding claim 11, it would have been obvious to obtain an plastic optical fiber has a transmission loss of 0.1dB/m or less in order to reduce the transmission loss and to enhance heat resistance and perform long distance communication.

Regarding claim 12, it would have been obvious to obtain an optical receiver has the minimum reception sensitivity of -25dBm or less in order to reduce the bit error rate.

***Allowable Subject Matter***

4. Claims 1-6 and 8-12 are allowed.

***Response to Arguments***

5. Applicant's arguments filed 05/03/2005 have been fully considered but they are not persuasive.

The applicant's arguments to claims 1-6 and 8-12 are not persuasive. The applicant's arguments do not directed to the limitations of claims 1-6 and 8-12 and applicant argues that the referenced US Patent No. 6,777,083 was granted on August 17, 2004 based on an application filed October 12, 2000. The present application was filed on June 22, 2001 and did not receive an Office Action until December 3, 2004 which is delay of 3 1/2 years and applicant argues that the Double Patenting rejection is improper. The examiner respectfully disagrees. The rejection, obviousness type patenting with secondary reference(s) as described above is proper (see form paragraph 8.36).

Therefore, it is believed that the limitations of claims 1-6 and 8-12 are still met by the combination of Mizota and Sasaki and the rejection is still maintained.

***Conclusion***

6. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

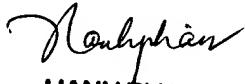
A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the

shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

7. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Hanh Phan whose telephone number is (571)272-3035.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Kenneth Vanderpuye, can be reached on (571)272-3078. The fax phone number for the organization where this application or proceeding is assigned is (571)273-8300.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703)305-4700.



HANH PHAN  
PRIMARY EXAMINER